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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,601	01/16/2004	Kyle Jeffrey Charlet	SVL920030101US1	8692
45112 7590 03/16/2007 KUNZLER & ASSOCIATES 8 EAST BROADWAY SUITE 600 SALT LAKE CITY, UT 84111			EXAMINER BLACK, LINH	
			ART UNIT 2163	PAPER NUMBER
			MAIL DATE 03/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Interview Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/759,601	CHARLET ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	LINH BLACK	2163	

All participants (applicant, applicant's representative, PTO personnel):

- (1) LINH BLACK. (3) DAVID J. MC.KENZIE.  
 (2) ALI MOHAMAD. (4) \_\_\_\_\_.

Date of Interview: 14 March 2007.

Type: a) ☒ Telephonic b) ☐ Video Conference

c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.

If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1-4, 13 and 18.

Identification of prior art discussed: Call (2002/0143521), Pic et al. (6988093), Fogarasi et al. (6128619).

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicants explained the differences between the prior art and the proposed amended-claims. Discussed 101 issues of claims 1, 13, and 18 (storage medium, processor, memory); Typos on claims 3 and 13; Examiner proposed added claim 4 into the independent claims to better overcome the provided prior art. An updated search will be conducted when the Applicants' response is received.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

  
 MOHAMMAD ALI  
 PRIMARY EXAMINER

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

\_\_\_\_\_  
 Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

**Kunzler & McKenzie**  
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**FAX COVER SHEET**

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**Date:** March 8, 2007  
**Fax:** (571)273-4106  
**To:** Linh Black  
**From:** David J. McKenzie  
**Re:** 10/759,601-Interview Agenda

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**Number of Pages including cover: 11**

Please contact me if there is a problem with this transmission.

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I hereby certify that this correspondence is being transmitted by either email to [linh.black@uspto.gov](mailto:linh.black@uspto.gov), electronic submission using the EFS WEB submission system, fax to the U.S. Patent and Trademark office to fax number **571-273-4106**, or is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 to on March 8, 2007.

PATENT

Client No. SVL920030101US1

**Applicant:** Kyle J. Charlet et al.

Serial No.: 10/759,601

Confirmation No: 8692

Filed: January 16, 2004

**For: APPARATUS, SYSTEM, AND METHOD FOR  
PASSING DATA BETWEEN AN EXTENSIBLE  
MARKUP LANGUAGE DOCUMENT AND A  
HIERARCHICAL DATABASE**

Group Art  
Unit: 2163

**Examiner:**        **Linh Black**

## INTERVIEW AGENDA

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Ma'am:

This paper is in response to the telephone interview planned for March 14<sup>th</sup> at 1pm EST. Applicants would like to discuss the following amendments in view of the Call, Pic, and Fogarasi references. Specifically, Applicants would like to discuss how these amendments distinguish over the references and clarify the meaning of terms used in the claims. A copy of the proposed amendments is included.

**\*\* Proposed Amendments – For Discussion Only \*\*****AMENDMENTS**

1. (Currently Amended) An article of manufacture comprising a program storage medium readable by a processor and embodying one or more instructions executable by a processor to perform a method for passing data between an eXtensible Markup Language (XML) document and a hierarchical database, the method comprising:

providing an Information Management System (IMS) hierarchical database;  
providing a metadata schema derived from the IMS hierarchical database, the metadata schema comprising a first representation representative of the hierarchical structure of the IMS hierarchical database, a second representation representative of the IMS hierarchical structure of XML documents valid for passing into and out of the IMS hierarchical database, a database field name, and an XML element name that maps to the database field name; and  
passing data between an XML document and the IMS hierarchical database using the metadata schema;  
receiving the XML document comprising XML elements organized according to the metadata schema;  
matching an XML element of the XML document with a metadata element defined in the metadata schema; and  
storing content data from the XML element in a database field of the hierarchical database identified by the matching metadata element.

**\*\* Proposed Amendments – For Discussion Only \*\***

2. (Canceled).

3. (Original) The article of manufacture of claim 2, further comprising selectively storing a sub-tree of the XML document intact in one or more nodes of the hierarchical database in response to a directive metadata element in the metadata schema, the sub-tree comprising an XML root element and one or more XML descendent elements stored with XML formatting information.

4. (Original) The article of manufacture of claim 1, wherein passing data comprises storing the eXtensible Markup Language (XML) document intact within the hierarchical database, the method comprising:

receiving the XML document and a database node identifier;

initializing a first database node of the hierarchical database identified by the database node identifier;

sequentially writing raw data from the beginning of the XML document into the first database node; and

selectively identifying a break point in the XML document, in response to the first database node filling with raw data, the method further comprising,

initializing a second database node that is a child of the first database node; and

sequentially writing raw data from the break point of the XML document into the second database node.

**\*\* Proposed Amendments – For Discussion Only \*\***

5. (Original) The article of manufacture of claim 4, further comprising:
- examining each XML element in the XML document and corresponding metadata element in the metadata schema, in response to an index indicator identified within the metadata schema for the XML document;
  - storing an index value from an XML element identified by the index indicator;
  - generating a secondary index that includes the first database node and at least the index value, such that the first database node is locatable using a database query that includes the index value.
6. (Original) The article of manufacture of claim 1, wherein passing data comprises retrieving the eXtensible Markup Language (XML) document from the hierarchical database, the method further comprising:
- receiving a query for the XML document;
  - matching each database field of the hierarchical database with a metadata element defined in the metadata schema;
  - generating an XML element defined by the matching metadata element, the XML element comprising content data from the matching database field; and
  - assembling the XML elements into the XML document.
7. (Original) The article of manufacture of claim 4, further comprising selectively retrieving a sub-tree of the XML document from one or more nodes of the hierarchical database in response to a directive metadata element in the metadata schema, the sub-tree comprising an XML root element and one or more XML descendent elements stored with XML formatting information.



**\*\* Proposed Amendments – For Discussion Only \*\***

8. (Original) The article of manufacture of claim 1, wherein passing data comprises retrieving the (XML) document in an intact format from the hierarchical database, the method further comprising:

receiving a key that uniquely identifies the XML document within the hierarchical database;

locating a first database node of the hierarchical database identified by the key;

sequentially writing raw data from the first database node into the XML document;

selecting a descendant database node of the first database node, in response to an indicator in the first database node, and sequentially writing raw data from the descendant database record into the XML document.

9. (Original) The article of manufacture of claim 8, wherein the first database node and descendant database node have at most one direct descendant.

10. (Original) The article of manufacture of claim 1, wherein the metadata schema comprises a database field type identifier and an XML element data type identifier that maps to the database field type identifier, the method further comprising selectively converting content data between the XML element data type and the database field type based on the database field type identifier and the XML element data type identifier.

**\*\* Proposed Amendments – For Discussion Only \*\***

11. (Original) The article of manufacture of claim 1, wherein the metadata schema comprises an XML schema generated from the hierarchical database and a database schema indicative of database field names and associated database field types for database fields of the hierarchical database, the database field names each mapping to a corresponding XML element in the XML schema.

12. (Canceled).

13. (Currently Amended) An apparatus for passing data between an eXtensible Markup Language (XML) document and a hierarchical database, the apparatus comprising:

a hierarchical database;

a metadata schema derived from the hierarchical database, the metadata schema

comprising a first representation representative of the hierarchical

structure of the hierarchical database, a second representation

representative of the hierarchical structure of XML documents valid for

passing into and out of the hierarchical database, a database field name,

and an XML element name that maps to the database field name; and

a mapping module in external communication with the hierarchical database and

configured to pass data between an XML document and the hierarchical

database using the metadata schema: and to store the XML document in

the hierarchical database, the mapping module comprising:

an input module configured to receive the XML document

comprising XML elements organized according to the metadata

schema;

**\*\* Proposed Amendments – For Discussion Only \*\***

a matching module configured to match an XML element of the XML document with a metadata element defined in the metadata schema;

a storage module configured to store content data from the XML element in a database field of the hierarchical database identified by the matching metadata element and to store an index value from an XML element identified by an index indicator;

an analysis module configured to examine each XML element in the XML document and corresponding metadata element in the metadata schema, in response to the index indicator identified within the metadata schema for the XML document;

a generator configured to generate a secondary index that includes the first database node and at least the index value, such that the first database node is locatable using a database query that includes the index value.

14. (Canceled).

15. (Canceled).

16. (Original) The apparatus of claim 13, wherein the mapping module is configured to retrieve the eXtensible Markup Language (XML) document from the hierarchical database, the apparatus further comprising:

an input module configured to receive a query for the XML document;

**\*\* Proposed Amendments – For Discussion Only \*\***

a matching module configured to match each database field of a sub-tree of the hierarchical database with a metadata element defined in a metadata schema;

a generator configured to generate an XML element defined by the matching metadata element, the XML element comprising content data from the matching database field; and

an assembler configured to assemble the XML elements into the XML document.

17. (Original) The apparatus of claim 13, wherein the metadata schema comprises a set of java classes representative of one or more nodes and one or more fields of the hierarchical database.

18. (Currently Amended) A system for passing data between an eXtensible Markup Language (XML) document and a hierarchical database, the apparatus comprising:

an interface configured to receive commands for passing data between a hierarchical database and an XML document comprising an input module configured to: receive an XML document comprising XML elements organized according to the XML schema; receive a query for the XML document and portions of the XML document;

a database schema comprising a set of java classes representative of one or more nodes and one or more database fields of the hierarchical database, the java classes comprising a database field name and a corresponding XML element name;

**\*\* Proposed Amendments – For Discussion Only \*\***

an XML schema corresponding to the XML document and configured such that the XML schema comprises a representation of the hierarchical structure of the hierarchical database and an XML element name that maps to the database field name in the database schema; and

a mapping module in external communication with the hierarchical database and configured to pass data between the XML document and the hierarchical database using the database schema in conjunction with the XML schema, the mapping module comprising:

a matching module configured to match an XML element of the XML document with a metadata element defined in the metadata schema and to match each database field of a sub-tree of the hierarchical database with a metadata element defined in a metadata schema;

a storage module configured to store content data from the XML element in a database field of the hierarchical database identified by the matching metadata element;

a generator configured to generate an XML element defined by the matching metadata element, the XML element comprising content data from the matching database field; and

an assembler configured to assemble the XML elements into the XML document.

19. (Canceled).

20. (Canceled).

REMARKS

[0001] Claims 1-20 are pending in this application. Claims 1-3 and 8-11 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Call (US 20020143521) (hereinafter "Call"). Claims 4-7 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Call in view of Pic et al. (US 6988093) (hereinafter "Pic"). Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Call in view of Pic and further in view of Fogarasi et al. (US 6128619) (hereinafter "Fogarasi"). Claims 13-20 are rejected based on the same grounds of rejection as for Claims 1-12.

[0002] This case has received a final rejection. Rather than appealing, Applicants prefer to determine through this interview what aspects are objectionable and what agreements can be reached, particularly with respect to the proposed claim amendments.

[0003] The amended independent claims 1, 13, and 18 clarify the differences between the art as taught in Call, Pic, and Fogarasi. Briefly, the proposed amendments clarify that the present invention operates in conjunction with an IMS hierarchical database and also clarify the role of the mapping module in coordinating the transfer and storage of information in the XML document to the IMS database. The amendments also highlight that the present invention has a metadata schema derived from the hierarchical database; as such, there is no need to change the database.

[0004] In the event any questions remain, the Examiner is respectfully requested to initiate a telephone conference with the undersigned.

Respectfully submitted,

\_\_\_\_\_/David J. McKenzie/\_\_\_\_\_

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Date: March 8, 2007

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